

**Clean Copy of Amended Claims**

1. (Amended) A method for determining order and/or lot sizes that are consistent with an entity's primary strategic objective, comprising the steps of:

- a. selecting a primary strategic objective;
- b. listing the possible strategic objective measures;
- c. selecting the primary strategic objective measure from said list of possible strategic objective measures;
- d. running the material requirements planning (MRP), manufacturing resource planning (MRP II) and any other management information system (MIS) for a planning period as if the currently required activities and/or work were in fact already ordered and/or run per the existing activity schedule and ordering rules to determine a first expected output;
- e. determining the first expected results from said first expected output as measured in terms of said primary strategic objective measure;
- f. modifying said existing activity schedule by removing one of said currently required activities or work in said existing activity schedule and re-running said MRP, MRP II and any other MIS for said planning period as if the remaining activities and/or work were in fact already run per said existing activity schedule and said existing ordering rules to determine a second expected output;
- g. determining the second expected results of said modified activity schedule created in step f as measured in terms of said primary strategic objective measure;
- h. taking said first expected results and subtracting said second expected results to determine the impact of said activity and/or work that was removed in step f on said strategic objective measure;
- i. determining the new order and/or lot size that is consistent with said primary strategic objective by taking said impact found in step h and subtracting any fixed amount associated with said activity or work that was removed in step f in the same units of measure as said primary strategic objective measure and then dividing the result by the

amount per unit or piece of said removed job, said amount being measured in the same unit of measure as said primary strategic objective measure; and

j. re-running steps d through i above for each different job and/or order.

2. (Amended) The method of claim 1, wherein said new order and/or lot size includes adding an additional quantity to said new order and/or lot size.

3. (Amended) The method of claim 1, wherein said new order and/or lot size includes an upper limiting value that is not to be exceeded.

4. Amended) The method of claim 1, wherein said new order and/or lot size is overridden and a substitute value put in for said new order and/or lot size.

5. (Amended) The method of claim 1, wherein said new order and/or lot size includes adding an additional quantity to the said new order and/or lot size and includes an upper limiting value that is not to be exceeded.

6. (Amended) The method as in any one of claims 1 through 5, wherein said primary strategic objective is any strategic objective.

7. (Amended) An apparatus for determining an entity's order and/or lot sizes that the entity purchases and/or produces consistent with and supportive of the entity's primary strategic objective, wherein said apparatus includes:

a. user interface devices and modules operatively coupled to said apparatus;

b. a memory that stores databases and computer readable code;

c. said databases including original databases and modified original databases;

d. a processor operatively coupled to said memory, said processor configured to implement said computer readable code, said code configured to:

i. receive, load and store the primary strategic objective measure in said memory or storage medium of said apparatus;

ii. modify the existing planned activities or work not yet completed to be temporarily assumed to be completed over a planning period and temporarily store said activities that are assumed completed in said modified original databases in said memory or storage medium of said apparatus;

iii. executing the materials requirements planning (MRP), manufacturing resource planning (MRP II) and any other management information system (MIS) program(s) for said planning period using said modified original databases per the existing schedule and ordering rules to determine the first expected output of said MRP, MRP II and MIS;

iv. determining the first expected results of said MRP, MRP II and MIS as measured by said primary strategic objective and store said first expected results in said memory or storage medium of said apparatus;

v. removing one of said activities or work in said modified original databases in said memory or storage medium of said apparatus and re-running said MRP, MRP II and any other MIS program(s) for said planning period as if the remaining said activities and/or work were in fact already run per the modified original databases list and ~~the~~ said existing ordering rules to determine the second expected output of said MRP, MRP II and MIS;

vi. determining the second expected results of said MRP, MRP II and MIS as measured in terms of said primary strategic objective measure and store said second expected results in said memory or storage medium of said apparatus;

vii. taking said first expected results and subtracting said second expected results to determine the impact of said activity and/or work that was removed in step v on said strategic objective measure;

viii. determining the new order and/or lot size that is consistent with said primary strategic objective by taking said impact and subtracting any fixed amount associated with said job that was removed in step v in the same units of measure as said primary strategic objective measure and then dividing the result by the amount per unit or piece, in the same units of measure as said primary strategic objective measure, of said job that was removed;

ix. re-storing said removed activity or work into said modified database with the new said order and/or lot size and storing the new order and/or lot size into said original database in said memory or storage medium of said apparatus; and

x. re-running steps v through ix above for each different activity and/or work currently planned in the planning period.

8. (Amended) An apparatus as recited in claim 7, wherein said code is configured to add and additional quantity to said new order and/or lot size.

9. (Amended) An apparatus as recited in claim 7, wherein said code is configured so that said new order and/or lot size has an upper limiting value that is not to be exceeded.

10. (Amended) An apparatus as recited in claim 7, wherein said code is configured to over-ride said new order and/or lot size with a substitute value.

11. (Amended) An apparatus as recited in claim 7, wherein the said code is configured to add and additional quantity to said new order and/or lot size and so that said new order and/or lot size has an upper limiting value that is not to be exceeded.

12. (Amended) An apparatus as in any one of claims recited in claim 7 through 11, wherein said primary strategic objective is any strategic objective.

13. (Amended) A computer program embodied on a computer-readable medium for determining an order and/or lot size that the entity purchases and/or produces consistent with and supportive of the entity's primary strategic objective, wherein said determination comprises a data structure instantiating code segment that establishes a storage record in memory having:

- a. the calculations for the primary strategic objective measure;
- b. a first expected results of the existing activities and/or work as measured by said primary strategic objective measure calculated over a planning period as if said existing activities and/or work were already completed;

c. a second expected results of the existing activities and/or work, less one of said existing activities, as measured by said primary strategic objective measure calculated over a planning period as if said existing remaining activities and/or work were already completed;

d. the difference between said first expected results and said second expected results; and

e. the new order and/or lot size as determined by taking said difference and subtracting any fixed amount associated with said removed job and dividing the result by any amount per piece or unit, wherein all said amounts are in the same units of measure as said primary strategic objective measure.

14. (Amended) A computer program embodied on a computer-readable medium as recited in claim 13, wherein said new order and/or lot size comprises a data structure instantiating code segment that establishes a storage record in memory having an additional quantity added to said new order and/or lot size.

15. (Amended) A computer program embodied on a computer-readable medium as recited in claim 13, wherein said new order and/or lot size comprises a data structure instantiating code segment that establishes a storage record in memory having an upper limiting value that said new order and/or lot size is not to exceed.

16. (Amended) A computer program embodied on a computer-readable medium as recited in claim 13, wherein said new order and/or lot size comprises a data structure instantiating code segment that establishes a storage record in memory wherein the said new order and/or lot size is over-ridden with a substitute value.

17. (Amended) A computer program embodied on a computer-readable medium as recited in claim 13, wherein said new order and/or lot size comprises a data structure instantiating code segment that establishes a storage record in memory having an additional quantity added to said new order and/or lot size and new order and/or lot size comprises a data structure instantiating code segment that establishes a storage record in

memory having an upper limiting value that said new order and/or lot size is not to exceed.

18. (Amended) A computer program embodied on a computer-readable medium as in any one of claims 13 through 17, wherein said primary strategic objective is any strategic objective.

19. (Amended) A device and system for determining an entity's order and/or lot sizes that the entity purchases and/or produces consistent with and supportive of the entity's strategic objective, said device and system comprising:

- a. a means for receiving, loading and storing the calculations for the primary strategic objective measure in said memory or storage medium of said device;
- b. a means for modifying the existing planned activities or work not yet completed to be assumed to be completed over a planning period and storing said activity that is assumed completed in said modified original databases in said memory or storage medium of the device;
- c. a means for executing the material requirements planning (MRP), manufacturing resources planning (MRP II) and any other management information system (MIS) program(s) for said planning period using-said modified original databases per the existing schedule and ordering rules to determine a first expected output;
- d. a means for determining the first expected results of said first expected output as measured by said primary strategic objective measure and storing said first expected results in said memory or storage medium of said device;
- e. a means for removing one of said activities or work in said modified original databases in said memory or storage medium of said device and re-running said MRP, MRP II and any other MIS program(s) for said planning period as if the remaining said activities and/or work were in fact already run per the modified original databases list and said existing ordering rules to determine a second expected output;
- f. a means for determining the second expected results of said second expected output as measured in terms of said primary strategic objective measure and storing said second expected results in said memory or storage medium of said device;

- g. a means for taking said first expected results and subtracting said second expected results found to determine the impact of said activity and/or work that was removed in step e on said strategic objective measure;
- h. a means for determining the appropriate new order and/or lot size that is consistent with said primary strategic objective by taking said impact and subtracting any fixed amount associated with said job that was removed in step e in the same units of measure as said primary strategic objective measure and then dividing the result by the amount per unit or piece, in the same units of measure as said primary strategic objective measure, of said job that was removed;
- i. a means for re-storing said removed activity or work into said modified database with the new said order and/or lot size and storing the new order and/or lot size into said original database in said memory or storage medium of said device; and
- j. a means for re-running steps e through i above for each different activity and/or work currently planned in the planning period.

20. (Amended) The means of claim 19, wherein said means includes additional means for adding an additional quantity to said determined order and/or lot sizes.

21. (Amended) The means of claim 19, wherein said means includes additional means for establishing an upper limit on said determined order and/or lot sizes that is not to be exceeded.

22. (Amended) The means of claim 19, wherein said means includes additional means for over-riding -said determined order and/or lot sizes with a substitute value.

23. (Amended) The means of claim 19 wherein said means includes additional means for adding an additional quantity to said determined order and/or lot sizes and means for establishing an upper limit on said determined order and/or lot sizes that is not to be exceeded.

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24. (Amended) The means as in any one of claims 19 through 23 wherein said primary strategic objective is any strategic objective.